CHALLENGES OF TEACHING WRITTEN COMMUNICATION IN THE CLOUD

Denitza Charkova, Ivan Shotlekov

FMI, Plovdiv University “Paisii Hilendarski”
dcharkova@gmail.com, ivan@shotlekov.net

***Abstract**: In this article, the authors of the textbook "English for ICT: Lifelong Writing in the Cloud" provide insights about some of the challenges they and their first-year students in ICT-related Bachelor programs encountered in the context of collaborative learning in the Cloud. By sharing some highlights of their experience, they wish to improve the quality of their teaching in higher education in order not only to create willingness for learning, but also to prepare their students for real life. Written communication skills are among the set most employers of ICT staff expect.*

***Key words**: Cloud, written communication, collaborative learning, action learning, reflection*

1. Introduction

Modern educational settings have rapidly evolved during the past decade allowing for innovative and interesting teaching methods to be exercised both inside and outside the classroom. This dynamic environment, created by the pervasiveness of technology in all facets of life, triggers the necessity of action learning in contemporary education [1]. It will soon become unthinkable for instructors to continue using only the traditional paper-based methods without integrating technology or multimedia in their teaching, simply because students will need a different type of learning experience to hold their attention. Still, there are many challenges to be faced when educating students in the Cloud. Since almost every student is already technologically equipped and competent, the introduction of technology has limited the willingness of students to study by the traditional methods and still retain high motivation for learning. In order for instructors today to develop key competences in their students in any subject matter and in the same time keep their interest high, integration of technology becomes essential for all types of modern learning practices. Written communication was chosen in view of students’ current and future academic and professional needs confirmed by a number of studies, e.g. by Microsoft, Target Jobs, the BBC, Prospects, NACE and AGR [2].

2. Learning in the Cloud

Enhancing instructional methods through shared practices and collaborative learning in the Cloud has become a preferred method for many teachers, since it

provides a wide range of information and in the same time develops necessary computer skills within young professionals who are yet to establish themselves on the labour market. It allows for students to build constructive competences [3], since they base their class work on both prior knowledge and newly adopted skills. This, in combination with the vast data flow that the Internet offers to all its users, becomes the most useful educational tool available. Even though learning in the Cloud seems extremely pleasurable, it can sometimes have its challenges.

Many of the difficulties of teaching in the Cloud are connected to technological impediments such as the number of computers shared by students in the classroom, as well as Internet distractions, which may lead students to engage in other amusements instead of participating in the lesson. In this respect, the role of the instructor becomes more complex as there is a responsibility for monitoring computer activity appears. In addition, the need for students to apply multitasking in their classwork and projects is another drawback for many, since these qualities are not innate to all students and need yet to be developed. When working in the Cloud, it is also essential for instructors to be technologically equipped and skilled, since creativity becomes just one integral part of the teaching process but is no longer central. Even though the majority of ICT students should be aware of computer and Cloud basics, it is the instructor who should guide and support students on their learning journey, as an educational facilitator. Furthermore, the plagiarism issue remains, since many students still practice the bad habit of copy-pasting. These are just some of the challenges met, but considering the various classroom environments, instructors must be ready to face others.

In order to tackle these drawbacks, the authors of the textbook "English for ICT: Lifelong Writing in the Cloud", D. Charkova & I. Shotlekov [4], have created within their English language courses a balanced combination between traditional paper based and Cloud based didactic materials to better build constructive learning among students of English enrolled in ICT related programmes at FMI, Plovdiv University “Paisii Hilendarski”. This is the first of the series of course books published by the authors intended to boost students' motivation to learn and develop their language skills while performing shared learning practices in the Cloud. This first course book focuses on a skill expected by most employers: written communication.

3. English for ICT: Lifelong writing in the Cloud

During the Fall trimester of academic year 2013/2014, the authors' work was based on exactly this combination - regularly drawing students' attention from one educational source to the other and thus minimizing the possible distractions that students might find on the Internet. The transitions between individual, pair and group work from one exercise to the next, motivated the vast majority of students to interact and communicate with one another. Classroom experience finds that most

students enjoy collaborative vs. individual work in the Cloud and together manage to meet their deadlines. These skills, combined with multitasking competences, further develop since during the first trimester students prepare for teamwork, which is expected from them during the following winter trimester when learning and teaching is based on [5]. Because of the diverse lesson structure and varied work patterns, students would be keen on sharing experience and contributing to in-class discussions. The shift between the paper book, the Cloud (Google Drive) and the specially designed learning website which supplements the book (http://books.shotlekov.net), created a persistent motivation within most students to be active and not get distracted while having access to technology and social media during class sessions.

In the course of the Fall trimester of academic year 2013/2014, students were required to learn some of the basic structures of familiar written formats in English such as building a paragraph, essay, summary, technical report, writing for the web, creating presentations, designing CVs and cover letters. In this respect, they were offered the opportunity to enrich their knowledge in areas which they will need in the future. Each chapter of the book covers one topic and is designed to guide students to understand the suggested material through numerous discussions, varied work patterns and collaborative work in the Cloud. Lessons begin with thoughts and reflections on prior knowledge connected to the subject matter. Students are encouraged to stimulate discussions and share experience. In the theory part of each chapter, students were required to educate themselves on a specific part of a text and then teach it to their peers in pairs or groups allowing for a deeper understanding of class content. This was based on the Learners Teach Learners in the Cloud (LTLIC) approach, a component of Ivan Shotlekov's method Web-based Interdisciplinary Project-Oriented Teaching of Information Technology (WIPOTIT) [6, pp. 37-39). Wide-ranging exercises are provided for students to do inside and outside of class, as also an additional section in each chapter (FastLane) considers bright learners who tackle the tasks faster and need to be engaged in class activities while others are still working on pervious tasks. Chapters include at least one video (in the form of a listening exercise), which is connected to the class content. The chapters contain shorter and longer in-class tasks and include a CollectingPoint, K section, which considers tasks to be done at home and shared with the teacher in the Cloud. Students summarize what they have learned in the end of each class and have to perform self and peer evaluation after completing the in class activities as well as homework assignments. After the first during class evaluation process, all students have access to the grade they have given themselves as well as a grade from a peer and the instructor. This data is collected and publishes in the educational website during the break so that students can receive feedback during class. The process is anonymous (only including student ID numbers) and is done on a random basis so that learners do not know who they are grading and who they

have been graded by. This makes the evaluation process much more accurate and effective. Self and peer evaluation is done also after completion of the homework activity (in section K) which has a deadline for all students in a group, ensuring that all students have sent their work and can now grade each other.

Managing this type of class instruction incorporates a lot of 'behind the scenes' work that is mainly performed by the instructor. In this connection the necessity of skilled instructors is essential. It is often time consuming and stressful for teachers if they have two groups in one day or more than four groups in a week because of the complexity and work surrounding a paper and Cloud based educational model. Much more energy, motivation and computer skills are necessary when educating students in the Cloud. For this module to work dynamically and engage the learners in the instruction process teachers must be familiar with many technological impediments, which this article examines.

4. Technical challenges

As IT expert and course book author Kosta Garov observes, "Today we can conclude that Informatics and Information Technology are established school subjects in the Bulgarian school curriculum and they enjoy great interest by secondary school students [7, p. 14]." This presupposes that first-year university students should not find it challenging to delve into E-learning, but is it so in real life? Can they send emails with meaningful Subject lines, Email From lines, to name a few? What percent of our students follow the good practices in file naming conventions?

Even though Cloud computing is generally user-friendly and positively accepted by learners there are some key issues and niceties that deserve consideration. The most important information that instructors using the Cloud for educational purposes have to account for is that new Google Drive users may have to wait 24 hours before they can begin to use the Cloud services. Once students have become acquainted with the Cloud availabilities, they have to name their CloudPortfolios (shared with the instructor) with their Academic ID, so as for the teacher to work easily with the self and peer evaluation raw data. In some cases when students get distracted in class, instead of uploading a document through the Submission Form, they send a link to their CloudPortfolio and sometimes these links are not accurate or there are other file problems, which complicate the teacher's work in multitasking mode.

When teaching students in the Cloud, it is very important that learners have access to Internet equipped computers. In many real life situations however, computers are not always as many as all students in the group. This issue has been easily been accounted for by the authors of the two-book series by using a design that alternates between course book and Cloud modes. Also, the course book is a three-in-one environment: paper book, Cloud and dedicated website to support and vary the learning process, students may take turns using the computers as they

work on different exercises. Also, students are invited and encouraged to bring their own devices, e.g. laptops, tablets and smartphones to class (BYOD) and they find it more comfortable to work on a familiar device accessing the Internet by WiFi, 3G, etc. The paper component solves the issue with insufficient number of workplaces, as well as with electricity and connection outages, etc.

5. More is not always better

Self-evaluation and Peer Evaluation are key parts in the reflection process. Many students, though, make redundant entries when they perform self and peer evaluation and enter information more than once. Some of them seem to believe the Thank you receipt is not enough and go back to the Submit screen a couple of times to submit their work again and again “just in case”.

	A	B	C	D	E	F	G
2	40	2013-11-03	2	en	2013-11-03	2013-11-03	Konstantin
3	19	2013-11-02	2	en	2013-11-02	2013-11-02	Teodor Sa
4	20	2013-11-02	2	en	2013-11-02	2013-11-02	Daniel Lyu
5	48	2013-11-03	2	en	2013-11-03	2013-11-03	Nikolay To
6	66	2013-11-03	2	en	2013-11-03	2013-11-03	Kristina Di
7	42	2013-11-03	2	en	2013-11-03	2013-11-03	Slav Chush
8	57	2013-11-03	2	en	2013-11-03	2013-11-03	Georgi Bor
9	69	2013-11-03	2	en	2013-11-03	2013-11-03	Петър Ми
10	16	2013-11-02	2	en	2013-11-02	2013-11-02	Бойко Ива
11	65	2013-11-03	2	en	2013-11-03	2013-11-03	Alexander
12	67	2013-11-03	2	en	2013-11-03	2013-11-03	Alexander
13	68	2013-11-03	2	en	2013-11-03	2013-11-03	Alexander
14	51	2013-11-03	2	en	2013-11-03	2013-11-03	Vasil Pala
15	26	2013-11-03	2	en	2013-11-03	2013-11-03	Nikola Iliev

Fig. 1. Redundancy of student input

In addition, in the biodata part of the Evaluation Form, some students mistakenly select ‘Peer’ instead of ‘Author’ for their role in the evaluation process and slow down the teacher who has to verify the raw data. This must be taken into account by the instructor so that each student has only one entry and statistical information is accurate and easily understood by students. When at the end of the course students are not sure if they have shared their CloudPortfolio correctly, they send it directly to the teacher’s email, which again complicates the checking.

An additional problem arises when a student comes late for their first English session and is not familiar with general computer use. Then s/he may find it a bit challenging to get to grips with the learning infrastructure, e.g. Google Drive, CloudPortfolio, Click Submit and wait for the ‘Thank you’ screen instead of closing the browser window right away and losing all the information entered.

6. World Wide Web Distractions

One of the main challenges of Cloud-based instruction is managing to have all students be efficient multitaskers, e.g. do the same thing at the same time, while 'hanging out' in the Cloud [1]. Because of all the Internet availabilities that can distract students, the teacher's role becomes much more complex than being the main input provider. In this type of education, the learner becomes the central figure and the instructor acts like a guide and facilitator of the learning process. This poses a great challenge to many teachers, especially those who have worked only by traditional methods as they might feel they are losing control of the classroom. The best way to deal with such a case, in view of the authors' experience is to have the teacher observe students' work with the computers. A monitoring is necessary, since students' familiarity with social media creates their necessity to 'log in.' Having understood and accepted this as modern educators, teachers must be more mobile in terms of covering classroom space during individual, pair and group activities, so as to see whether all students are following and are on the right track.

It is the task of a contemporary teacher to encourage and guide all students in and outside of class within their multitasking experience. There are students who are convinced they can hardly learn much from the teacher because everything is in the Net. "… the teacher vs the Internet. This is the big challenge – the educator has to prove every time (class) s/he is "bigger" than the Internet because this is the sole reason not to be replaced but to be preferred. The trainer must create such a learning environment where the Internet cannot provide ready answers but is rather a tool in finding solutions to real life problems" [6, pp. 91-92].

7. Technologically challenged instructors

Another prerequisite when using this mode of education concerns the instructors' technological competences. It is essential for teachers to be able to teach students how to use and benefit from all that scaffolding via Cloud computing has to offer [8]. Even though the dynamic technological sphere allows for students to be sometimes more familiar with technological options than instructors, teachers should not be intimidated, but rather open-minded. Because of the perpetual development of technology it is impossible for students to receive all their information only from schools, universities and teachers. Today there is a lot of learning happening outside of the classroom, which many students are taking full advantage of. [9] Since instructors can in no way limit or filter the information flow that their students receive from all the smart devices they possess, the chances that students will sometimes know more increase. Understanding and accepting this phenomenon, will help teachers construct their lesson in a more interactive way and educate their students in line with the aspirations of modern society. Meeting students' needs is what instructors must strive to achieve. The stale stream of knowledge (class content) designated by teacher to be transferred to students is

something that is only holding education and individual knowledge development back. That is why we can say that it is also the role of teachers, which has shifted, as it is more of a guiding process rather than simply teaching class content.

8. The Copy-Paste learners

A great challenge which teachers today encounter when checking projects, reading papers and listening to presentations is the bad habit of copy pasting. It has entered the educational system to such an extent all the way from primary school to university, that students do not even think of paraphrasing, citing or summarizing, but assume that it is not wrong to duplicate others' ideas and present them as their own. The main problem stems from the secondary education in Bulgaria as most students are not efficiently taught that ideas and other types of intellectual property should be attributed to the author.

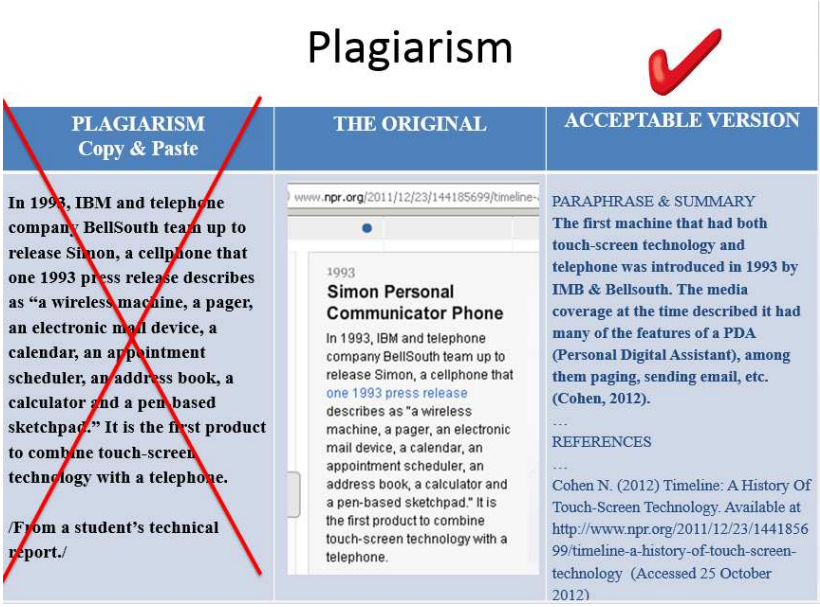

Fig. 2. Plagiarism as the modern plague

Many of the students who worked with “English for ICT: Lifelong Writing in the Cloud” had encountered such problems in their past studies. However, the second chapter is devoted to “Paraphrasing and Citing” and takes an in-depth look at the subject matter, teaching students how they should give credit to the original authors when using their intellectual property. Equipped with skills and knowledge about

summarizing (Unit 6 in the course book), our students were prepared to meet their raised awareness.

9. Time management and deadlines

Another missed opportunity for students concerns time management and deadlines. They by and large seem not to have developed these skills in primary and secondary school and do not use Cloud applications to that end. This is a key challenge because most of them have developed some bad habits in secondary school. They know there will be no consequences and expect rain-checks and endless second chances. Moreover, a deduction of points, ultimately leading to a lower grade, is something they feel strongly about and demand for re-sits until they get a satisfactory grade. Such bad practices must be addressed as early as in primary school, because the later, the more difficult it becomes to eradicate them. Else, it would be alarmingly common to acknowledge that "More than half of employers said all or almost all graduate recruits started work without vital attributes, such as team work, communication, punctuality and the ability to cope under pressure." [10] This finding about UK universities is even more true of their Bulgarian counterparts. Addressing such issues at school level involves attitudes such as "Checking and assessment of students' knowledge concerns the students themselves, as well as their parents, relatives and society at large." [11, p. 248]. The Cloud is open 24/7/7 and class skippers have no excuse for not attending classes physically in the classroom, which is acknowledged as a welcome flexibility by those who are occasionally prevented from physical presence in the formal settings of the classroom.

10. Conclusions

Educating students in the Cloud is something relatively new to teaching practices, however it opens many perspectives and allows students to work collaboratively, share experience and accumulate skills which will be tremendously important in the technologically advanced times we live in. Despite all the contribution to education and learning, Cloud computing poses a great challenge to many teachers who not only have to be creative educators, but ICT-skilled instructors as well. While empowering students to create data and use it on multiple devices, this approach calls for respecting copyright issues and deadlines alike.

Acknowledgements

This work was partially supported by the project „Integrating IT in Scientific Research in Mathematics, Informatics and Pedagogy of Teaching", Contract No NI13-FMI-002.

References:

1 Hale, R. (2012): Action Learning in the Cloud, Training Journal Fenman Ltd. (TJ), September 2012, (Last accessed on 01 Mar 2014 on www.trainingjournal.com).

2 University of Kent (nd): What are the top ten skills that employers want? Available on http://www.kent.ac.uk/careers/sk/top-ten-skills.htm (Last accessed on 01.03.2014).

3 Denton, W. D.: Enhancing Instruction through Constructivism, Cooperative Learning and Cloud Computing, 2012, TechTrends, July/August 2012, Volume 56, Number 4.

4 Charkova, D., & Shotlekov, I.: English for ICT: Lifelong Writing in the Cloud. Plovdiv University Publishing House, Plovdiv, Bulgaria, 2013.

5 Shotlekov, I., & Charkova, D.: English for ICT: Learner Autonomy in the Cloud. Plovdiv University Publishing House, Plovdiv, Bulgaria, 2014.

6 Garov, K.: Some Methodological aspects of teaching Informatics and Information Technologies, University Press “Paisii Hilendarski”, Plovdiv 2013. Bulgaria. (Original title in Bulgarian: Гъров, К. Някои методически аспекти на обучението по ИНФОРМАТИКА И ИНФОРМАЦИОННИ ТЕХНОЛОГИИ, Университетско издателство „Паисий Хилендарски“. Пловдив 2013.).

6 Shotlekov I.: Web-based interdisciplinary project-oriented teaching of Information Technology to students of Informatics, PhD thesis paper, Plovdiv, 2012 (Original title in Bulgarian: Шотлеков И. (2012). Уеб-базирано интердисциплинарно проектно-ориентирано обучение по информационни технологии на студенти по информатика. Дисертационен труд за присъждане на образователната и научна степен "доктор". Пловдив.).

8 Despotović-Zrakić, M., Simić, K., Labus, A., Milić, A., & Jovanić, B.: Scaffolding Environment for Adaptive E-learning through Cloud Computing. Educational Technology & Society, 2013, 16 (3), 301–314.

9 Lamb, M.: ‘It depends on the students themselves’: independent language learning at an Indonesian state school, Language, Culture and the Curriculum, 2004, 17, 229-245.

10 Paton G.: University leavers lack the essential skills for work, employers warn, The Telegraph, 12 Sep 2013. (Last accessed on 1 Mar 2014 on http://www.telegraph.co.uk/education/educationnews/10306211/University-leavers-lack-the-essential-skills-for-work-employers-warn.html).

11 Delinov E, Marasheva-Velinova I.: Assessment rubrics for practical projects. Mathematics And Education In Mathematics, Proceedings of the Forty Third Spring Conference of the Union of Bulgarian Mathematicians. Borovetz, April 2–6, 2014 (Original title in Bulgarian: Делинов Е, Марашева-Делинова И. Критерии за оценка на проект с практическо предназначение. Математика и математическо образование. Доклади на Четиридесет и трета пролетна конференция на Съюза на математиците в България. Боровец, 2-6 април, 2014).